

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Rechannelization of the 17.7-19.7 GHz)	WT Docket No. 04-143
Frequency Band for Fixed Microwave Services)	
under Part 101 of the Commission's Rules)	

Comments of Comsearch

Comsearch, a division of Andrew Corporation specializing in spectrum management of terrestrial microwave, satellite, and mobile telecommunications systems, hereby respectfully submits the following comments in response to the Notice of Proposed Rulemaking in the above captioned proceeding.

We support the proposed addition of new frequency plans with channel bandwidths of 1.25, 2.5, 5, 30, and 50 MHz. The addition of the new channels narrower than 10 MHz bandwidth will be a welcome replacement for the 5 MHz channels lost in the 18 GHz Report and Order and will allow licensees to tailor the amount of spectrum they occupy to their actual capacity needs. Furthermore, the new 30 and 50 MHz channels are suitable to handle high capacity radios using technology similar to other microwave bands, possibly leading to economies of scale. We do not believe that adding the new channels will make analyzing the interference potential among paths in the band significantly more complex – the existing approaches for determining the appropriate interference objectives easily extend to accommodate the new channels.

On the other hand, we do not support re-pairing the 220 MHz channels to maintain availability of one pair nor even maintaining the 220 MHz channels in the rules at all. There are not any

available microwave radios designed to use these channels, and none have been sold for many years. Further, it seems extremely unlikely that any manufacturer would design any new product when only one frequency pair would be available for licensing. Radios are now available that allow implementation of high capacity links on channels of 30 to 80 MHz bandwidth, and in the unlikely event that the capacity of one channel pair would not be enough, multiple pairs could be licensed on a link. Therefore we believe that the 220 MHz channel pairs have outlived their usefulness and may safely be deleted from the rules.

The Commission previously decided that PCOs and other MVPDs could use the spectrum below 18.142 GHz as one potential replacement for the 18.3-18.58 GHz spectrum no longer available to them on a primary basis. If the Commission chooses to proceed with making additional 18 GHz spectrum available to PCOs and MVPDs for their conventional operations, then further rule changes would be required. The Commission would have to either: (a) accommodate the use of 6 MHz channels below 18.142 GHz in Part 78, or (b) accommodate the use of 6 MHz channels below 18.142 GHz and remove the final link restriction in Part 101. The NPRM proposes the Part 101 solution but instead of adding a 6 MHz channel plan simply states that MVPDs would be allowed “in the 17.8-18.3 GHz sub-band to use whatever size channels in contiguous spectrum that they deem necessary to accommodate analog or digital transmission techniques.”¹ We disagree with the approach of letting PCOs and MVPDs use this 500 MHz segment without any channel plan. There is no demonstrated reason why one-way users (primarily MVPDs) should have more flexible use of the spectrum than any other user. Since cable television distribution and therefore also MVPDs are closely tied to a 6 MHz channel plan, we believe that

¹ NPRM at ¶12.

orderly spectrum management demands that a 6 MHz channel plan would have to be added to this segment to accommodate MVPDs. PCOs and MVPDs could use either this 6 MHz plan or any of the other plans (5 MHz, 10 MHz, etc.), but should not have total flexibility to use whatever channels and bandwidths they would choose.

Furthermore, if the Commission does decide to allow flexible use of the 17.7-18.3 GHz or 17.7-18.58 GHz segments, the language of proposed rule §101.147(r)(x) requires clarification with respect to the concept of “contiguous spectrum”. We presume (but are not certain) that the intent of the proposed rule is that users are expected to apply for contiguous spectrum (rather than multiple non-contiguous channels) if a contiguous segment is available, but that users could skip any segments affected by interference with other links. Whether our interpretation is correct or not, we believe that the proposed rule requires clarification. Because this concept of contiguous spectrum usage has never before been proposed for microwave spectrum, the Commission should state precisely how the rule is to operate.

Respectfully Submitted,

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